

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:

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**PCT**

## NOTIFICATION OF TRANSMITTAL OF INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(PCT Rule 71.1)

Date of mailing (day/month/year)	03.06.2005
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Applicant's or agent's file reference 65134AWOM1	<b>IMPORTANT NOTIFICATION</b>	
International application No. PCT/EP2004/003697	International filing date (day/month/year) 07.04.2004	Priority date (day/month/year) 17.04.2003
Applicant CROMPTON VINYL ADDITIVES GMBH et al.		

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary report on patentability and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.
4. **REMINDER**

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary report on patentability. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the *PCT Applicant's Guide*.

The Applicant's attention is drawn to Article 33(5), which provides that the criteria of novelty, inventive step and industrial applicability described in Article 33(2) to (4) merely serve the purpose of international preliminary examination and that "any Contracting State may apply additional or different criteria for the purpose of deciding whether, in that State, the claimed invention is patentable or not" (see also Article 27(5)). Such additional criteria may relate, for example, to exemptions from patentability, requirements for enabling disclosure, clarity and support for the claims.

Name and mailing address of the IPEA	Authorized officer
<p>European Patent Office D-80298 Munich Tel. +49 89 2399-0 Tx: 523656 epmu d Fax: +49 89 2399-4465</p> 	<p>Borinski, W</p>  <p>Tel. +49 89 2399-8237</p>

# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

Applicant's or agent's file reference 65134AWOM1	FOR FURTHER ACTION		See Form PCT/IPEA/416
International application No. PCT/EP2004/003697	International filing date (day/month/year) 07.04.2004	Priority date (day/month/year) 17.04.2003	
International Patent Classification (IPC) or national classification and IPC C08K5/17, C08K5/21, C08K5/29			
Applicant CROMPTON VINYL ADDITIVES GMBH et al.			

<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>5</u> sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input checked="" type="checkbox"/> (<i>sent to the applicant and to the International Bureau</i>) a total of <u>5</u> sheets, as follows:</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of Administrative Instructions).</li> <li><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</li> </ul> <p>b. <input type="checkbox"/> (<i>sent to the International Bureau only</i>) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>
<p>4. This report contains indications relating to the following items:</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Box No. I Basis of the report</li> <li><input type="checkbox"/> Box No. II Priority</li> <li><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</li> <li><input type="checkbox"/> Box No. IV Lack of unity of invention</li> <li><input checked="" type="checkbox"/> Box No. V Reasoned statement according to Article 35(2) with regard to novelty, inventive step or industrial applicability, citations and explanations supporting such statement</li> <li><input type="checkbox"/> Box No. VI Certain documents cited</li> <li><input type="checkbox"/> Box No. VII Certain defects in the international application</li> <li><input checked="" type="checkbox"/> Box No. VIII Certain observations on the international application</li> </ul>

Date of submission of the demand 26.10.2004	Date of completion of this report 03.06.2005
Name and mailing address of the IPEA European Patent Office D-80298 Munich Tel. + 49 89 2399-0 Tx: 523656 epmu d Fax: + 49 89 2399-4465	Authorized officer Schütte, M Tel. +49 89 2399-7291

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.  
PCT/EP2004/003697

## Box No. I. Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
  - This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:
    - international search (under Rules 12.3 and 23.1(b)).
    - publication of the international application (under Rule 12.4).
    - international preliminary examination (under Rules 55.2 and/or 55.3).
2. With regard to the elements of the international application, this report is based on (replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):

## Description, pages

1-30 as originally filed

## Claims, No.

1-13 received on 14.02.2005 with fax

- a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3.  The amendments have resulted in the cancellation of:
  - the description, pages
  - the claims, Nos.
  - the drawings, sheets/figs
  - the sequence listing (specify):
  - any table(s) related to sequence listing (specify):
4.  This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)):
  - the description, pages
  - the claims, Nos.
  - the drawings, sheets/figs
  - the sequence listing (specify):
  - any table(s) related to sequence listing (specify):

\* If item 4 applies, some or all of those sheets may be marked "superseded."

**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**

International application No.  
PCT/EP2004/003697

**Box No. V      Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement****1. Statement**

Novelty (N)	Yes:	Claims:	13
	No:	Claims:	1-12
Inventive Step (IS)	Yes:	Claims:	--
	No:	Claims:	1-13
Industrial Applicability (IA)	Yes:	Claims:	1-13
	No:	Claims:	--

**2. Citations and explanations (Rule 70.7):**

**see separate sheet**

**Box No. VIII      Certain observations in the international application**

The following observations on the clarity of the claims, descriptions, and drawings or on the question whether the claims are fully supported by the description, are made:

**see separate sheet**

## 1 Reference is made to the following documents:

D1: WO 03/004558 A (COGNIS DEUTSCHLAND GMBH; DAUTE PETER (DE); MARKS DIETER (DE); KLAMANN) January 16, 2003 (2003-01-16)

D2: WO 02/072684 A (CROMPTON VINYL ADDITIVES GMBH; FRIEDRICH HANS-HELMUT (DE); WEHNER WOL) September 19, 2002 (2002-09-19)

D3: WO 02/48249 A (CROMPTON VINYL ADDITIVES GMBH; FRIEDRICH HANS-HELMUT (DE); HOPFMANN T) June 20, 2002 (2002-06-20)

**Point V and VIII:**

## 2 Article 33(2), PCT:

2.1 The present Claims 1 - 10 and 13 relate to a stabilizer system which comprises a) a perfluoroalkanesulfonate salt and b) at least one indole and/or urea and/or alkanolamine and/or aminouracil (I), (II), (III) and (IVa, b). Intended use is not a technical feature for product claims (**Article 6, PCT**).  
Claim 11 discloses a process for stabilizing chlorine-containing polymers against thermally induced degradation via use of said system.  
Claim 12 describes a consumer article which comprises said system, and again in this case intended use is not regarded as a technical feature (**Article 6, PCT**).

2.2 Document D1 describes PVC stabilized via addition of fluoroalkanesulfonic salts (see Claims 1, 4, and 8). Furthermore, cyanoacetylurea and aminouracils *inter alia* are used as stabilizers (see pp. 3 - 4 and 6). Stabilization of halogen-containing plastics against thermal and/or photochemical degradation is described on p. 2, lines 1 to 3. Thermal stability is determined via the test on page 44.  
Example 4 shows the use of dimethylaminouracil ( $\approx$  IVa) and shows the sodium salt of trifluoromethanesulfonic acid as stabilizer for PVC.  
D1 is prejudicial to novelty of the subject matter of Claims 1 - 12.

2.3 Claim 13 can be regarded as novel because there has been no disclosure of a combination composed of perfluoroalkanesulfonate salt and alkanolamine (III).

**3 Article 33(3), PCT:**

3.1 Starting from D1, the object was provision of a novel stabilizer composition for halogenated polymers. The proposed manner of achieving the object cannot be regarded as inventive because document D3 discloses stabilizer systems composed of a) perchlorates and b) alkanolamines. It was obvious to the person skilled in the art that the teaching of D1 (perfluoroalkanesulfonate salt) and of D3 (alkanolamine) could be combined, because both documents disclose the thermal stabilization of halogen-containing polymers as object.

3.2 The subject matter of the claims is not inventive.

**4 Article 33(4), PCT:**

4.1 The subject matter of the claims has industrial applicability.